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ABSTRACT

The way that college finances vary by student and college characteristics was studied. Attention was directed to the types of institutions and students who benefit from educational assistance programs and the degree these sources of assistance cover the students' educational costs. The data were obtained from the 1982 Cooperative Institutional Research Program Survey of first-time, full-time freshmen, and from the 1982 College Scholarship Institutional Survey. Based on the use of multivariate analysis, findings include the following: there is a rapid decline in average Pell awards both in dollar received and dollar per educational cost from the family with $10,000 to the median $25,000 income; receipt of Supplemental Educational Opportunity Grants and state grants show a decline from $15,000 to the $25,000 median income; students with family incomes between $25,000-$40,000 receive less Guaranteed Student Loans, National Direct Student Loans, and College Work Study assistance than did students with family incomes below $25,000 but more than students with family incomes exceeding $40,000; students from higher income families obtain more assistance from summer work; and students receive more aid in college grants and this aid covers more of their educational expenses as institutional costs rise from the $5,500 median to $9,000. (SW)

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How Do Student College Finances Vary by Student and Institutional Characteristics?

James P. Maxwell*
Salvatore B. Corrallo

Paper presented at
American Educational Research Association - 1984

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Abstract

This study demonstrated the use of multivariate analysis in verifying the significance and measuring the degree of association, in reaching the following conclusions:

- There is a rapid decline in average Pell both in dollar received and dollar per educational cost from the family with $10,000 to the median $25,000 income.
- Receipt of SEOG and State grants show a decline from $15,000 to the $25,000 median income.
- Students with family incomes between $25,000-$40,000 receive less GSL, NDSL, and CWS assistance than students with family incomes below $25,000 but more than students incomes exceeding $40,000.
- Students from higher incomes obtain more assistance from summer work.
- Students receive more aid in college grants and this aid covers more of their educational expenses as institutional cost raise from the $5,500 median to $9,000.
- Students in institutions exceeding $5,500 obtain more GSL and summer work.
- Commuter students obtain more part time work. Residential students obtain more GSL, NDSL and savings from summer work.
- Students from the top high school quintile receive more college grant, state grant and other grants.
- College grants and college work study cover more of the student's expenses and average Pell dollar is higher at private schools than at public schools.
- Savings from summer work cover less of the educational expenses of students attending private schools.
- The GSL covers more of the educational costs of students attending 2-year schools than those attending 4-year schools.
- Males obtain more savings from summer work than females.

I. Introduction

This study's purpose is to describe how college finances vary by student and college characteristics. To describe college finances one must measure the cost of attending college and the sources of revenue or assistance available while attending college. Variations in these measures are then related to institutional and student characteristics. By relating measures of educational cost and sources of educational assistance to institutional and student characteristics, the study determines which institutions and students benefit from educational assistance programs and the degree these sources of assistance cover the students' educational costs.

Recent Federal policy studies have described variations in student financing by using descriptive tables of the apparent relationships but include no measure of the degree or significance of those relationships. The major contribution of this study is to show how standard statistical methods should be used to measure the degree and significance of the relationships between college finances and other student or institutional characteristics. Whether an apparent difference in averages receipt of award can be considered different will depend on how consistently the students within a classification receive an award that average for the classification and how many students in the sample were used to calculate the average of the classification. The evidence may not be strong enough to conclude a difference even when the differences in averages are large. By demanding the use of significance and a minimum level of association, the study enforces a discipline that prevents the research or from making interpretations that are not warrented from the data.

Students incur considerable expense while attending college. Some of these expenses are directly college related such as tuition, educational fees, books, and supplies. The student must also pay for transportation, room, board, and many other expenses to remain in school. These costs vary by whether the student is a commuter or resident, graduate or undergraduate, is considered an out-of-State or in-State student, and attends a public or private institution.

To cover these expenses the student has several sources of revenue. The most important source is usually assistance from the students parents but the student may also be assisted by his own work or savings, or work under the College Work Study (CWS) program. The cost of college can be reduced through several grant programs such as the Pell Grant, Supplementary Educational Opportunity Grant (SEOG), State Student Incentive Grant, GI educational assistance grant, educational assistance as a son or daughter of a GI, and Social Security educational assistance. Students can delay the cost of college by obtaining loans from several programs such as the Guaranteed Student Loan (GSL) and National Direct Student Loan (NDSL). Several of these assistance programs are intended for students from families with low income, so a relationship with family income should be expected. Some programs also provide help partially on the basis of educational cost so that a relationship with cost should be expected. Other programs provide assistance on the basis of student academic attainment so that a relationship here should also exist.

For freshman students entering postsecondary education, the costs of college and revenue is important in determining whether a student will start school and once there remain. This study will examine the finances of first-time full-time dependent freshmen students.

The hypothesis is that receipt of financial assistance does vary by institutional and student characteristics. It is expected to vary because different types of students incur different costs and different student aid programs are intended to serve different student populations. However, just because an aid program does intend to serve different student populations does not mean that when different freshman populations are asked about their receipt of aid or assistance that they in fact are receiving different aid. To test this hypothesis two statistical main effects models were used. In the paper presented last year, Maxwell (1983) systematically tried to identify significant interactions in 1981 and 1978 but failed to find any. Tested were all possible interaction among the institutional and student characteristics used in this study except for sex. This year interactions are not included in the model or in other words a main effects model was used. Both models compare 18 sources of financial assistance with institutional and student characteristics but differ in that the first model uses the dollar value for that source of financial assistance and the second model uses the dollar value per cost. The first model tests for differences in the average dollar received across all of the 18 assistance variables, by institutional and student characteristics. The second model tests for differences in the average percent of cost or the degree that source of revenue covers the students educational cost across the 18 assistance variables, by institutional and student characteristics.

The statistical procedure used is multivariate analysis of variance, calculated by the Statistical Analysis System (SAS) procedure General Linear Model (GLM). This procedure provides several important measures of significance and degree of association. Significance is a measure of the probability that the associations are due to chance variations. In large samples, such

as this one, very small associations are highly significant. There are four measures of multivariate significance, this study used Wilks' Lamda with the level set at .0001. The univariate measure is the standard F test and the significance level used is also .0001. The measure of the degree of association is the variance accounted for by the predictor divided by the total variance. In other words, the expected improvement in the error of predicting financial assistance given the predictor. The measure at the univariate level is R^2 or correlation squared. The multivariate analog is 1- Wilks' Lamda, which is why Wilks' Lamda is used as a measure of significance. Significant results accounted for less than .0001 of the variance are quite common in this study but the degree of association is meaningless. Associations that do not exceed .01 of the variance at the multivariate level are eliminated.

The other important capability of this analysis procedure is the ability to make least squares estimates. For example, private schools charge more than public schools. Differences between public and private schools in assistance may be due to differences in charges and not in other inherent differences between public and private schools. The averages can be reweighted to produce new public and private college averages that have the same average cost. The difference between the two averages, after reweighting, are not due to cost because the costs in the two groups are now equal. These mean differences are also the actual hypotheses being tested by the models.

II. Data

The data on institutional characteristics, student characteristics, and financial assistance was all provided by the 1982 Cooperative Institutional Research Program Survey (CIRP) conducted by Higher Education Research Institute at the University of California at Los Angeles (Astin et. al. 1982). This is a survey of first-time full-time freshman students, which as the entry point to college education is a significant determinate of college access. See the list of variables is provided in Table 1. There are 18 sources of revenue; 8 grants, 4 loans, 4 work/savings and/spouse.

The cost data is derived from 1982 College Scholarship Institutional Survey (CSIS) which provides the costs of tuition and fees, books and supplies, room and board, transportation by resident and non-resident students. The cost used in this study is the cost claimed by the institution for the resident and non-resident student. Only the total cost, (the sum of the five costs) is used in this study.

Weights are applied in the sample data to represent the marginal frequencies of 37 statification and sex in the first-time full-time freshman population.

Adjustments were made for missing family income, cost, and high school rank. The missing cost data is imputed from average costs for that type of institution. The data set was reweighted to account for the missing high school rank and income data. Thus, the proportion by each of the stratified cells and sex remain the same and the total weighted population size remains the same. See Appendix A for more information.

Collection of data is dependent on student self report and institutional volunteers. Those who volunteer usually differ from those who do not. This means that the results are likely to be systematically biased. It is suspected that the bias is likely to be small within school since number of respondents by school is rather high. The bias is most apt to be in the schools who volunteer. However, the degree or whether there is a bias should be investigated. Also, students and particularly freshman students are often not an accurate source of financial data. Students are likely to be unfamiliar with the source and amount of aid and in estimating their family income.

Further, the financial assistance data is reported in 6 broad categories which while the family income data is reported in 14 broad categories both of which reduce the accuracy of that data.

III. Methodology

Several records were deleted from the total file. All bad records as identified on the CIRP file and all independent students were deleted. These deletions resulted in a drop in the number of records from 267,185 to 184,034.

The income and high school rank data are often missing. Approximately 15% of the records are missing one or both of these data items. After deleting these records the final file has 157,434 records. These records were reweighted so that the frequency by the 35 strata cells and sex would remain the same. The records are weighted up to 1,679,155 freshman dependent first-time full-time students. For a brief discussion of the effect of these changes see Appendix A.

The 18 financial assistance variables were recoded into dollar values. These values are $0, $250, $750, $1250, $1750, and $2500. The Pell grant maximum was set at $1800 instead of $2500 and the Supplementary Educational Opportunity grant (SEOG) was set at a maximum of $2000 instead of $2500, to be consistent with the maximum established by regulations.

The college cost was the sum of 5 costs depending on whether the student is a resident or commuter. These costs were categorized into $500 intervals.

When the sum of the 20 CIRP financial assistance categories exceeded the total cost the 18 assistance categories were rateably reduced to equal the total cost.

"Percent of cost" figures were calculated for each student by dividing each of the assistance dollars by total cost.

The study uses multivariate analysis of variance. The General Linear Model (GLM) of the Statistical Analysis System (SAS) was used in the analysis.

Table 1

Data Elements Used in This Study

I. Aid Sources

1. Pell
2. Supplementary Educational Opportunity Grant (SEOG)
3. State Scholarship or Grants
4. Other College Grants
5. Other Private Grants
6. Guaranteed Student Loan (GSL)
7. National Direct Student Loan (NDSL)
8. Other College Loan
9. Other Loans
10. College Work Study (CWS)
11. Part time work while attending (PT)
12. Full time work while attending (FT)
13. Savings from summer work
14. Other Savings
15. Spouse
16. Your G.I. Benefits
17. Parents G.I. Benefits
18. Social Security Student Benefits (SS)

II. Student Characteristics

1. Family Income
2. Commuter or Resident
3. Sex

III. School Characteristics

1. Type - University, 4-year and 2-year
2. Control - Public or Private

IV. Costs from College Scholarship Service by Commuter and Resident

1. Tuition and Fees
2. Books and Supplies
3. Room and Board
4. Transportation
5. Other Personal Expenses

As was discussed previously, this analysis system provides measures of significance and va. ance accounted for. The SAS procedure generates far more data than can be easily reproduced, the tables in the results section summarizes the major results. Table 2 shows the multivariate R^2 or 1-Wilks' Lamda for both models. Also shown are the characteristic equations. The characteristic equation shows you how to add the 18 variables together to get the largest R^2 relationship with the institutional or student factor. In cases where the factor consists of more than two categories, then their are more than one characteristic equation, in fact the number of characteristic equations equals the number of categories minus one. Each characteristic equation accounts for a certain percentage of the multivariate R^2 relationship. The characteristic equation is useful in determining how to add the variables together but difficult to interpret. The data in Table 3 is easier to interpret. This table shows all the univariate R^2 that are significant beyond $p<.0001$. If there are only 2 classifications in a factor then the univariate R^2 squared shows the ability to discriminate between those two classes. When the factor has more than 2 classifications, such as income and cost then univariate R^2 may show discrimination between different classification contrasts. Table 4 and 5 list several contrasts between 2 classifications that identifies the discrimination the univariate R^2 is measuring. Many of the contrasts are not significant and indicate that the classifications can be aggregated these insignificant contrasts were not included in the table. Table 6 and 7 show the effect on the R^2 measures of this aggregation. Usually, the question is which factor is the most important and a covaried design addresses this question. However, there is also interests in whether the factor by itself is important before covariation. That is, a student's sex may be very important in amount assistance

but different sexes may choose different cost schools and attend different types of institutions and after cost and type of institution are taken into account the remaining effect of sex small. Table 6B and 7B provides the R^2 of the uncovaried aggregate factors.

The contrasts used are orthogonal contrast or uncorrelated contrasts. The contrasts are used to assess the difference between high on the ordinal factor and low on the ordinal factor. The first contrast used was above and below the approximate median. The next contrast used was the median of those below the median. This process was continued by taking median point of smaller and smaller aggregates until the contrasts was between 2 classifications. If the contrast between 2 classifications was not significant, then those classifications can be aggregated. Not significant means multivariate $R^2<.01$ or $p>.0001$. These contrast can usually be aggregated up to a significant contrast. For the High School Rank factor this was not the case and 2 sets of contrasts needed to be devised.

Caution is advised to anyone interpreting the actual numerical value or means reported in this paper. What is being investigated are the differences between these means and what affects these differences and not the actual value. Appendix A shows how these averages can jump around under different weights and samples. The problem is in determining how many students did not receive aid. This effects the average but not the differences between the averages.

IV. Results

The results are displayed in Tables 2-26 at the end of this chapter. The multivariate results are in Tables 2-7; these show the multivariate and univariate R^2 for the dissaggregated and aggregated models. The means

for all financial assistance measures by institutional and student characteristics are in Tables 8-14. The multivariate results indicated that several of the institutional and student characteristics could be aggregated without reducing significantly the accounted for variance. The means for the aggregated categories are displayed in tables 15-19. The least squared means for the total model are displayed in tables 20-23. The least squared means for the aggregated model are shown in tables 24-26.

The lead paragraph in each section describes the strength of the overall relationship with the 18 financial assistance variables. In the paragraphs that follow the significant results by each assistance variables are reported. Only, those variables that are significant are reported either in a general relationship with the factor or by one of the tested contrasts.

Family Income

The student's family income shows the strongest relationship with the financial assistance measures. Family income explains 29% of the average dollar variance and 28% of the percent of cost measures. When the income categories are aggregate from 14 to 6 categories, income still explains 21% of the average dollar variance and 22% of the percent of cost variance. These aggregated partial associations are close to the association without partialling, 23% for average dollar and 26% for the percent of cost.

The Pell grant has the strongest association with family income, accounting for 18% of the average dollar variance and 19% of the average percent of cost variance. The average dollar and percent of cost covered decline sharply the higher the family income. From the contrast table (Table 4); it is shown that families making under $10,000 in income receive significantly more Pell than families in the $10,000-15,000 range, who in turn receive significantly more than families in the $15,000-$25,000 range and they receive significantly more than those over $25,000 median family income.

The SEOG and State grants shows a weaker but similar effect in discriminating between family income levels below the $25,000 median. Students from families with incomes below $15,000 receive more of these grants than those between $15,000 to $25,000, and these students from families below $25,000 receive significantly more than those above $25,000 in income than those students from families with incomes above $25,000.

For the Guaranteed Student, National Direct Loans and College Work Study, and college grant students from families below the $25,000 income median have higher loans and cover more of these expenses with these loans. In addition, these programs discriminate between families above the median where $25,000-$40,000 family income group receive significant more assistance from these 4 programs than students from families above $40,000 in assistance. For the college grant the students from families in the $40,000 to $100,000 also receive significantly more aid than those students from families above $100,000 in family income.

Social Security assistance is greater and covers more of the cost of education for students below the median family income of $25,000 than those above the median. Summer work shows a modest opposite trend where students from higher income families tend to make more and cover more of these expenses.

Educational Cost

The second strongest factor affecting average dollar is educational cost. Cost is not included as a factor in the percent of cost model. Educational costs account for 14% of the variance with 23 categories and 10% when aggregated to 5 categories. However, the effect of the aggregated costs is much stronger without covariation, 24%.

The strongest association is with college grant. Students with total educational costs above $5,500 median receive significantly more in college grant assistance than those students who have less than $5,500 in college expenses. Also, students in $7,500 to $9,000 range receive significantly more college grant aid than students in the $5,500-$7,500 and students above $9,000 receive significantly more than students in the $7,500-$9,000 range. However, educational costs are also important factors in receipt of guaranteed student loans and amount of summer work. Guaranteed student loan and summer work assistance are significantly higher for students with educational expenses above the $5,500 median than those whose educational expenses are below $5,500.

Several other assistance variables show relationships before covariation, these are the CWS, NDSL, SEOG, State grants, other grants, and Pell.

Residential Status

The third most important predictor of financial assistance is whether the student is a resident or commuter student. The College Scholarship Service estimates different budget and total costs for the two types of students, but they also receive different levels of financial assistance. The residency factor accounts for 6% of the average assistance dollar variance and 10% of the percent of cost variance in the disaggregated model. The variance accounted for in the average dollar aggregated model is 8% which slightly higher since educational costs and family income are slightly weaker covariates in the aggregated model. The aggregate model without covariates is much higher, 13% for average dollar and 11% for percent of cost.

Much of the variance can be attributed to differences in part time work. Part time work accounts for 3% of the variance in the disaggregated and 4% in aggregated average dollar variance and 5% in the percent of cost variance. Commuter student obtain nearly 3 times as much money per student as resident student from part-time work and this money makes a higher contribution to their educational costs. On the other hand, GSL, NDSL and savings from summer work average higher and cover more of the cost of residential students than they do of commuter students.

College grants and Social Security assistance show association before covariation but lose that association after covariation.

High School Quintile Rank:

This predictor accounts for 4% of the variance in the average dollar and average percent of cost before and after aggregation. The aggregated model without covariates is higher at 6% for average dollar and 5% for percent of cost.

The college, state, and other grants all provide more aid dollars and contributing more to the student's education from the highest high school quintile.

Control:

Whether the student attends a public or private institution accounts for 1% of the average dollar variance but much more, 6%, of the percent of cost variance. In the aggregated model these variable accounts for 7% of the percent of cost variance. Without covariation, the relationship is much higher with 16% for average dollar and 8% for percent of cost.

The college grant covers much more of the college expenses at private schools than at public schools. However, the average dollar after controlling for differences in cost between public and private schools is not significantly greater than at public schools.

The Pell grant average dollar is higher in private schools but is not significantly higher as a percent of cost.

College Work Study and Summer work show significant effects in the aggregated model. The College Work Study is higher in private colleges. Dollars from summer work average higher at private colleges but cover less of the educational expenses than at public colleges. When cost and income are controlled both average dollar and percent of cost covered by summer work is higher at public colleges.

Other assistance-variable SEOG, State grant, GSL are significant before covariation.

Highest Offering:

The highest degree offered by the school accounts for 1% of the average dollar variance and 2% of the percent of cost variance. When the 3 levels of offering are reduced to 2 levels by aggregating 4-year and university levels, the highest offering accounts for 1% of the variance in both models. The aggregated model without covariation is much higher with 5% for average dollar and 4% for percent of cost.

The only effect is that the guaranteed student loan covers much more of the educational costs at 2-year colleges than at 4-year colleges and universities. Though 4-year college and university students on the average receive higher loans, the higher costs in these institutions is less loan per educational expense. When educational cost and family income is controlled the theoretical average dollar and percent of cost covered is higher at 2-year colleges.

With the uncovaried aggregated model, GSL is not significant but college grant and CWS are significant.

Sex:

Sex shows the weakest association among all the factors, only 1% of the association for either average dollar or percent of cost. The association is still only 1% even without covariation.

Most of this variance is due to males obtaining more summer work dollars and that work covering more of their educational costs.

V. Conclusions:

This study demonstrated the use of multivariate analysis in verifying the significance and measuring the degree of association. The following is a list of conclusions, all of which have been verified and shown significant to the .0001 level and accounting for at least .5% of the variance.

- Students from low income families receive more Pell grant than students from higher income families. In fact, there is a rapid decline in average Pell both in dollar received and dollar received per educational cost from the family with $10,000 to the median $25,000 income
- Students from low income families also receive more SEOG and State grants. These grants show a decline from $15,000 to the $25,000 median income in both average dollar and percent of cost covered.
- Students from families below $25,000 in income receive more social security educational assistance in average dollar and percent of cost than students with higher incomes.
- Students with family incomes below $25,000 receive more GSL, NDSL, and CWS assistance than those students from families with higher incomes. In addition, students with family incomes in the $25,000-$40,000 range receive more assistance from these three sources than students whose family income exceeds $40,000.
- Students from families under $25,000 also receive more college grants dollars and these dollars cover more of their cost. In addition, students in $25,000 to $100,000 range of family income receive more college grants than those students from families that exceed $100,000.

- Students from higher incomes tend to obtain more assistance from summer work and th's work covers more of their cost.
- Students attending higher cost institutions receive more aid in college grants and this aid covers more of their educational expenses. Students exceeding $9,000 in education cost receive more college grants than those in the $7,500-$9,000 range who receive more than those in the $5,500-$7,500 range who receive more than those under the $5,500 median.
- Students in higher cost institutions, exceeding $5,500 obtain more GSL and summer work and this covers more of their expenses.
- Commuter students obtain more part time work and cover more of their expenses from that work.
- Residential students obtain more GSL, NDSL and savings from summer work on the average and cover more of their expenses from these sources.
- Students from the highest high school quintile rank receive more college grant, state grant and other grants and this contributes more to their educational expenses.
- College grants cover more of the student's expenses at private schools than at public schools.
- Pell Grant average dollar is higher for students attending private schools but it does not cover more of their educational costs.
- College Work Study contributes more to educational costs for students at private colleges than at public colleges.
- Savings from summer work cover less of the educational expenses of students attending private schools even thougn they average more dollars.
- The GSL covers more of the educational costs of students attending 2-year schools than those attending 4-year schools and universities even though these students obtain less loan money.
- Males obtain more savings from summer work than females and this covers more of their educational expenses.

More work is needed on establishing the actual dollar value which is not accurate for several reasons. First, the students who fill out the CIRP questionnaire are those who are more likely to have some kind of financial assistance yet may not be aware of the source or amount. When missing values are removed the average dollar values and average percent of cost values significantly increase. The actual per student values may be lower than reported in these tables. Percent receiving aid may also vary by sample but average dollar per recipient may be more stable.

The least squares estimates provided by SAS are not accurate in obtaining a true reflection of average dollar and percent while equating differences in other factors. The default assumption assumes as equal number of students in each of the groups. In other words, the over $100,000 in family income group is assumed to have as many students as the $25,000-$40,000 income range. In a main effects model the estimate should take into account differences in the number of students in the categories. When the categories were aggregated the least squares changes were largely due to changes in the estimated size of the categories. Some work is needed to provide least squares estimates that depend on the size of the categories.

However, the effect of both of these problems is to raise or lower the average value but not to change the difference between estimates or the association. Changing samples can effect significance but the levels are very high and slight changes will not effect the results.

The earlier paper by Maxwell (1983) failed to find any significant interaction either among all the institutional and student characteristics considered in this model or across the years 1978 and 1981. However, a test for interaction would be of interest. That paper also showed that commuter students cover more of their expenses through work than residential students. It also showed that students at private schools receive more aid from college grant and CWS than students at public colleges.

Appendix A

The means of the financial variables change depending on the sample and weighting. The means reported in the first column of Table 27 are before dropping the records missing income and high school rank information and using the weights from CIRP.

The second column shows the means after deleting the records with missing information and using the CIRP weights. The means for all the financial data has significantly increased. The average cost has also increased but not so much that the percent of cost have not also increased.

The third column shows the effect of reweighting the data. In general the reweighting does slightly decrease the averages of the financial variables. However, the decrease is small and not even close to the increase that occurred when deleting the files.

The last column shows the effect of using unweighted means.

The averages increase when deleting data mainly because students who don't respond to income and high school rank are also not responding to the 18 financial assistance questions.

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Table 2
Multivariate Results
Characteristic Equations

		Income		Cost		Rank	Status	Sex	Control	Type
	R^2	28.57		14.30		3.87	5.78	1.04	1.90	1.40
	% of Root	79.48	18.67	58.54	24.00	93.44	100	100	100	76.74
	PELL	152	-76	-26	46	3	-43	47	104	-43
A	SEOG	71	-14	58	-14	-32	-5	18	11	-52
V	State Grant	57	22	21	74	113	-5	14	28	24
E	College Grant	25	67	103	-113	104	-14	24	51	-21
R	Other Grant	23	43	58	-31	147	-28	11	-1	-38
A	GSL	17	63	59	58	-13	-23	-7	-33	77
G	NDSL	24	68	43	64	-1	-37	-26	-32	69
E	College Loan	6	47	47	28	-21	-28	22	-12	59
	Other Loan	8	45	41	45	-17	-38	-24	-10	32
D	CWS	42	76	27	-78	22	-45	-16	123	-154
O	PT Work	6	57	14	39	-6	219	16	-19	-65
L	FT Work	16	9	-19	0	-33	93	132	49	-90
L	Summer Work	-14	34	45	22	35	-65	145	-67	-24
A	Savings	5	19	43	8	30	-27	-7	-31	12
R	Spouse	-9	-19	-43	-16	-62	-1	94	94	0
	GI	28	7	16	1	-58	71	290	-16	55
	GI Percent	36	29	-37	-34	-33	-39	48	104	-32
	Social Security	90	-22	26	39	0	-9	-24	2	-19
	% of Cost									
	R^2	28.00				4.49	9.63	1.02	6.27	1.70
	% of Root	83.63	14.68			93.20	100	100	100	72.45
P	PELL	7094	-2837			-210	-1009	1357	-226	-1551
E	SEOG	4540	960			-1501	-942	1513	3084	-3558
R	State Grant	3123	1652			5778	-541	661	2247	1796
C	College Grant	1545	3688			7016	-1510	2054	8836	-4576
E	Other Grant	1109	2242			7929	-1290	150	-24	-271
N	GSL	660	3456			-213	-1963	275	714	3676
T	NDSL	1059	4027			262	-2907	-1239	372	3714
	College Loan	212	2516			-898	-1863	1335	329	3118
O	Other Loan	322	2468			-694	-2232	-644	-59	-1941
F	CWS	250	4396			1669	-2241	-633	4728	-5605
	PT Work	237	2598			-404	8521	-463	-1286	-1389
C	FT Work	848	344			-1583	4048	4397	-990	-3164
O	Summer Work	-653	1635			1397	-3134	7135	-2762	-406
S	Savings	134	877			1377	-1431	-284	-1073	979
T	Spouse	24	-730			-2792	982	3135	-227	295
	GI	1353	138			-2447	2439	11683	-335	1949
	GI Parent	1592	1685			-1665	-464	1655	-594	80
	Social Security	4108	-653			-16	-410	-827	-515	-273

Table 3

Variance Accounted For, R^2

Average Dollar	Total	Income	Cost	Rank	Status	Sex	Control	Type
PELL	21.28	18.04	.31	.02	.31	.04	.56	.07
SEOG	5.58	3.29	.78	---	.05	---	.06	.04
State Grant	7.70	3.42	.85	.89	.02	---	.09	---
College Grant	19.30	2.30	4.18	1.18	.14	.01	.18	.05
Other Grant	3.97	.36	.71	1.15	.06	---	---	.09
GSL	10.53	3.38	3.39	.05	.25	---	.09	.38
NDSL	3.30	1.50	.57	---	.19	---	---	.04
College Loan	.84	.02	.26	.02	.04	---	---	.03
Other Loan	.96	.18	.28	.02	.11	---	---	---
CWS	10.36	3.71	.94	.11	.38	---	.43	.23
PT Work	5.53	.41	.63	.02	3.32	.03	.05	.06
FT Work	.43	.04	.03	---	.14	.05	---	.05
Summer Work	7.36	1.06	1.29	.25	.55	.74	.40	.09
Savings	1.95	.25	.50	.11	.09	.02	.14	.04
Spouse	.16	---	.05	.04	---	.01	.02	---
GI	.26	.05	---	.06	.03	.07	---	---
GI Parents	.20	.08	.07	.01	.01	---	.03	---
Social Security	1.16	1.08	.06	---	---	---	---	---
Percent of Cost								
PELL	19.64	18.92		---	.19	.01	.03	.12
SEOG	3.94	3.47		---	.09	---	.30	.05
State Grant	4.88	3.54		.93	.04	---	.34	.02
College Grant	9.26	1.29		1.62	.21	.02	3.87	.24
Other Grant	2.08	.25		1.38	.06	---	---	.07
GSL	4.35	2.66		.07	1.33	---	.13	.54
NDSL	1.77	1.16		---	.61	---	.04	.06
College Loan	.33	.14		.03	.13	---	---	.05
Other Loan	.45	.17		.03	.26	---	---	.02
CWS	5.19	3.20		.11	.46	---	.93	.17
PT Work	6.94	.35		---	4.76	---	.23	.02
FT Work	.50	.05		.02	.25	.04	.02	.04
Summer Work	4.60	.99		.21	.99	.79	1.04	.12
Savings	1.04	.24		.11	.16	.01	.31	.06
Spouse	.11	---		.05	.01	---	---	---
GI	.30	.06		.08	.04	.06	---	---
GI Parent	.13	.09		.02	---	---	---	---
Social Security	1.13	1.06		---	---	---	.02	---

All reported values are P<.0001 significance level or less

Table 4

Significant Contrasts
Average Dollar
(R^2)

	Income 1	Income 2	Income 3	Income 6	Income 7	Cost 1	Cost 2	Cost 7	Cost 13	Rank 2	Type 1	Rank 6
Pell	16.29	4.58	.71	.37	.03	.01	.15	.05	.01	----	.05	----
SEOG	2.97	.58	.09	.31	.06	.17	.02	.04	.06	----	.03	----
State Grant	3.00	.34	.05	41	.06	.13	.15	.04	.21	.40	----	.82
College Grant	.91	----	----	1.39	.51	1.68	1.80	----	1.02	.66	.03	1.23
Other Grant	.15	----	----	.16	.07	.27	.36	----	.03	.66	.02	1.31
GSL	.91	.05	.02	1.95	.32	1.61	.15	.44	.14	.04	.37	.02
NDSL	.74	----	----	.52	.06	.22	.01	.07	.03	.01	.03	.02
College Loan	----	----	----	.10	.07	.12	.08	.02	----	----	.02	.01
Other Loan	----	.02	.01	.13	.07	.09	.01	.04	----	.01	----	.02
CWS	2.51	.07	----	1.21	.23	.23	.30	----	.13	.04	.20	.14
PT work	----	.05	.02	.26	.08	.15	----	.08	----	.01	.06	----
FT work	.01	----	----	----	----	----	----	----	----	----	.03	.01
Summer work	.31	.17	.04	.28	.28	.78	.18	.18	.16	.02	.01	.17
Savings	.10	.05	.01	.02	.04	.32	.15	.06	.04	.03	----	.11
Spouse	----	----	----	----	----	.02	----	----	----	----	----	.01
GI	.02	----	----	----	----	----	----	----	----	----	----	----
GI parents	.05	----	----	----	----	.02	----	----	----	----	----	.01
Social Security	.95	.26	.02	.02	----	.01	----	.02	----	----	----	----
Total ($1-\lambda$)	21.37	6.42	1.09	6.10	1.71	5.58	3.52	1.11	1.86	1.90	1.07	3.65

Income 1: Above or below $25,000 family income
Income 2: $15,000-$25,000 vs. below $15,000
Income 3: $10,000-$15,000 vs. below $10,000
Income 6: $25,000-$40,000 vs. above $40,000
Income 7: $40,000-$100,000 vs. above $100,000
Cost 1: Above or below $5,500 educational cost
Cost 2: $5,500-$9,000 vs. above $9,000
Cost 7: $4,500-$5,500 vs. below $4,500
Cost 13: $5,500-$7,500 vs. $7,500-$9,000
Rank 2: Top 20th percentile vs. 60-80th percentile
Type 1: 2-year vs. more than 2-year

Table 5

High School Quintile Rank
From Low To High Means

Average Dollar	1	2	3	4	5
PELL	208.50	215.52	225.15	207.61	203.44
SEOG	44.32	44.66	43.30	46.52	59.34
State Grant	66.55	77.77	85.35	104.79	167.79
College Grant	96.95	91.35	108.29	169.18	395.81
Other Grant	22.53	29.10	31.77	45.98	147.46
GSL	320.87	343.19	397.70	435.40	464.58
NDSL	43.17	61.48	72.36	78.05	97.79
College Loan	51.77	44.68	51.73	56.22	57.62
Other Loan	39.40	63.66	64.01	68.14	68.68
CWS	75.35	77.34	91.95	113.38	160.30
PT Work	92.77	99.04	114.78	113.76	94.60
FT Work	14.23	12.74	14.12	10.50	9.30
Summer Work	194.50	234.39	288.94	355.38	407.32
Savings	93.01	104.84	118.61	143.15	181.11
Spouse	7.40	8.06	7.80	4.25	2.59
GI	8.79	5.84	3.50	2.11	1.73
GI Parents	17.44	8.67	7.73	6.87	4.76
Social Security	30.59	30.46	26.77	26.40	26.22
Percent of Cost					
PELL	3.91	4.12	4.27	3.70	3.30
SEOG	.85	.81	.76	.73	.78
State Grant	1.22	1.43	1.48	1.71	2.53
College Grant	1.36	1.38	1.58	2.25	4.80
Other Grant	.38	.51	.54	.75	2.13
GSL	5.36	5.88	6.92	6.99	6.39
NDSL	.72	1.05	1.26	1.25	1.40
College Loan	.93	.77	.92	.90	.79
Other Loan	.69	1.13	1.14	1.11	1.00
CWS	1.28	1.30	1.51	1.73	2.13
PT Work	1.79	2.12	2.39	2.25	1.69
FT Work	.29	.28	.30	.22	.18
Summer Work	3.34	4.30	5.35	6.21	6.31
Savings	1.77	1.93	2.21	2.51	2.78
Spouse	.16	.15	.16	.08	.04
GI	.22	.13	.08	.04	.03
GI Parents	.34	.18	.16	.13	.09
Social Security	.57	.58	.54	.49	.44

Table 6A

Aggregated R^2
Average Dollar

Average Dollar	Total	Income	Cost	Rank	Status	Sex	Control	Type
Pell	20.41	17.50	.23	----	.39	.03	.78	.06
SEOG	4.86	3.08	.23	----	.10	----	.11	.03
State Grant	7.25	3.29	.60	.87	.05	----	.22	----
College Grant	18.33	2.05	3.44	1.27	.11	.01	.52	.07
Other Grant	3.47	.26	.45	1.34	.08	----	----	----
GSL	8.98	3.01	2.33	.02	.69	----	.03	.31
NDSL	2.74	1.28	.23	.02	.46	----	.01	.03
College Loan	.69	.14	.01	.01	.09	.01	----	.02
Other Loan	.87	.18	.21	.02	.16	----	----	.01
CWS	9.58	3.34	.57	.15	.49	----	.49	.15
PT work	4.99	.36	.19	----	4.14	.03	.01	.10
FT work	.36	.02	.02	.01	.19	.05	.02	.04
Summer work	6.53	1.07	1.05	.20	1.18	.78	.34	.04
Savings	1.64	.23	.42	.12	.22	.02	.12	----
Spouse	.10	----	.03	.02	----	.01	.04	----
GI	.17	.02	----	----	.03	.07	----	----
GI parents	.13	.06	.04	.01	----	----	.04	----
Social Security	1.07	1.01	.04	----	----	----	----	----
Total	-----	26.75	9.77	3.85	8.34	1.08	2.42	1.02

Table 6B

Average Dollar Without Covariance

	Income	Cost	Rank	Status	Sex	Control	Level
Pell	16.96	1.38	----	.37	.04	1.93	.19
SEOG	2.44	1.52	.05	.35	----	1.58	.29
State Grant	2.64	2.75	1.15	.32	.03	2.39	.32
College Grant	.34	14.09	3.11	2.00	.01	10.87	2.64
Other grants	.06	1.59	2.03	.54	----	.83	.52
GSL	1.81	5.14	.03	1.54	----	2.77	.01
NDSL	.83	1.03	.09	.74	.03	.77	.06
College Loan	.08	.44	----	.20	.01	.27	----
Other Loans	.13	.50	----	.34	----	.22	.02
CWS	1.78	4.84	.68	.18	.04	4.85	1.44
PT Work	.55	.21	.03	4.22	.09	.04	.17
FT Work	.03	.05	.03	.22	.06	----	----
Summer Work	1.63	2.22	.67	2.82	.74	.43	.99
Savings	.40	.76	.32	.65	.02	.13	.20
Spouse	----	----	.03	----	.02	----	----
GI	.02	----	.02	.05	.08	----	.02
Parents GI	.07	----	.02	----	----	----	----
Social Security	.98	.04	----	2.28	.02	.02	----
Total	22.60	23.94	6.12	12.52	1.08	16.29	4.76

Table 7A

Revised R^2
Percent of Cost

	Total	Income	Cost	Rank	Status	Sex	Control	Type
Pell	18.74	18.60	----	----	.16	----	.06	.04
SEOG	3.78	3.37	----	----	.09	----	.31	.04
State Grant	4.68	3.51	----	.87	.04	----	.36	----
College Grant	9.07	1.27	----	1.57	.19	.02	4.13	.22
Other Grant	1.95	.19	----	1.47	.08	----	----	----
GSL	3.86	2.47	----	.03	1.33	----	.15	.55
NDSL	1.60	1.01	----	----	.61	----	.04	.06
College Loan	.28	.11	----	.02	.12	----	----	.05
Other Loan	.43	.16	----	.02	.25	----	----	.02
CWS	4.96	3.00	----	.10	.47	----	.89	.16
PT work	6.86	.29	----	----	4.86	----	.24	.02
FT work	.43	.02	----	.02	.27	.04	.01	.02
Summer work	4.29	.97	----	.14	1.08	.79	1.29	----
Savings	.89	.20	----	.10	.19	.02	.40	----
Spouse	.06	----	----	.02	.01	----	----	----
GI	.20	.02	----	----	.04	.07	----	----
GI parents	.10	.07	----	.02	----	----	----	----
Social Security	1.07	1.00	----	----	----	----	.02	----
Total	-----	26.73	----	4.19	9.76	1.01	6.73	1.28

Table 7B

Average Percent of Cost Without Covariance

	Income	Rank	Status	Sex	Control	Level
Pell	18.33	.03	----	.06	.03	----
SEOG	3.10	----	.10	---	.35	.09
State Grant	3.20	.87	.04	.04	.34	.02
College Grant	.50	2.58	1.26	---	5.38	1.83
Other Grants	.13	1.69	.18	.02	.02	.17
GSL	2.17	.03	.63	---	.07	.29
NDSL	.85	.02	.44	.03	.05	----
College Loan	.10	.02	.07	---	----	.03
Other Loans	.15	.01	.19	---	----	----
CWS	2.24	.29	.84	.04	1.25	.64
PT Work	.65	.13	6.27	.04	1.13	.81
FT Work	.04	.04	.34	.05	.05	.02
Summer Work	1.31	.18	.89	.78	.88	.07
Savings	.26	.11	.13	.01	.31	----
Spouse	----	.03	.02	.01	----	----
GI	.03	.03	.08	.08	.01	.04
Parents GI	.08	.02	----	----	.01	----
Social Security	1.04	----	.01	.01	.04	.01
Total	25.59	5.44	10.93	1.06	7.93	3.70

Table 8A

Average Dollar by Income

		INCOME (000)						
		Under 20	less than 4	4-6	6-8	8-10	10-12.5	12.5-15	15-20
PELL	AVERAGE	467.79	648.66	657.99	632.83	559.34	503.12	406.88	320.83
SEOG	AVERAGE	79.94	110.81	112.68	100.98	87.89	83.49	74.83	58.23
STATE GRANT	AVERAGE	176.24	200.47	201.12	200.81	203.59	183.17	169.31	149.31
COLLEGE GRANT	AVERAGE	155.48	140.75	152.56	145.98	157.84	152.14	162.61	159.81
OTHER GRANT	AVERAGE	63.38	54.97	55.68	53.49	60.33	68.29	63.77	67.62
GSL	AVERAGE	408.58	341.29	334.79	359.88	392.90	417.33	436.10	441.18
NDSL	AVERAGE	98.28	77.81	73.83	94.48	93.29	101.58	100.95	100.44
COLLEGE LOAN	AVERAGE	39.90	29.41	41.12	35.23	32.38	40.67	43.90	43.49
OTHER LOAN	AVERAGE	48.17	31.99	41.46	33.86	37.85	53.96	49.89	56.76
CWS	AVERAGE	126.94	137.56	135.78	131.68	130.76	135.85	124.38	116.87
PT WORK	AVERAGE	116.57	85.44	98.76	119.61	113.35	120.29	122.36	124.28
FT WORK	AVERAGE	13.25	20.78	15.21	19.48	8.32	12.77	12.56	11.38
SUMMER WORK	AVERAGE	213.33	148.35	145.84	180.96	184.48	211.14	234.45	253.43
SAVING	AVERAGE	95.95	68.68	79.12	69.33	88.72	87.42	112.73	114.29
SPOUSE	AVERAGE	4.28	6.58	4.96	5.84	3.78	3.62	3.57	4.24
GI	AVERAGE	4.38	7.45	2.28	5.18	4.24	2.11	7.54	3.16
PARENTS GI	AVERAGE	11.22	11.48	14.33	10.87	7.69	10.55	11.55	11.83
SOCIAL SECURITY	AVERAGE	54.64	78.85	78.16	63.23	58.81	58.95	53.13	48.84

Table 8B
Average Dollar by Income

		INCOME (000)						
		20-25	25-30	30-35	35-40	40-50	50-100	over 100
PELL	AVERAGE	195.24	125.16	87.89	70.41	53.52	34.61	24.80
SEOG	AVERAGE	40.84	29.50	21.24	16.97	11.18	6.00	3.83
STATE GRANT	AVERAGE	124.60	97.65	80.61	64.39	52.14	35.34	18.66
COLLEGE GRANT	AVERAGE	158.30	159.10	154.74	142.19	125.29	87.24	48.21
OTHER GRANT	AVERAGE	78.27	69.91	64.49	60.51	63.37	48.41	36.25
GSL	AVERAGE	466.35	486.96	436.31	330.00	278.56	174.33	55.47
NDSL	AVERAGE	92.02	89.37	68.32	49.15	38.30	17.60	4.06
COLLEGE LOAN	AVERAGE	49.56	54.61	53.84	49.77	52.02	40.81	14.62
OTHER LOAN	AVERAGE	59.91	65.88	71.06	66.51	59.19	52.78	21.28
CWS	AVERAGE	107.87	98.72	78.20	61.07	48.49	25.60	10.58
PT WORK	AVERAGE	138.28	142.42	142.84	129.61	115.81	83.93	42.23
FT WORK	AVERAGE	15.78	13.69	11.48	9.33	10.83	9.95	5.88
SUMMER WORK	AVERAGE	286.99	324.59	356.19	358.20	368.42	342.52	234.37
SAVING	AVERAGE	122.78	131.47	148.88	155.98	168.18	146.85	123.29
SPOUSE	AVERAGE	5.12	4.48	5.95	3.34	5.16	7.16	8.41
GI	AVERAGE	2.88	3.48	1.81	2.58	2.35	2.21	0.58
PARENTS GI	AVERAGE	7.73	7.59	4.63	5.87	5.39	2.85	2.18
SOCIAL SECURITY	AVERAGE	25.53	19.99	14.89	12.53	10.89	10.57	9.86

Table 9A
Average Percent of Cost by Income

		INCOME ($000)							
		Under 20	Less than 4	4-6	6-8	8-10	10-12.5	12.5-15	15-20
PELL PER COST	AVERAGE	18.25%	14.21%	14.67%	14.30%	12.32%	11.08%	8.80%	6.87%
SEOG PER COST	AVERAGE	1.56%	2.32%	2.30%	2.01%	1.74%	1.66%	1.38%	1.06%
STATE GRANT PER COST	AVERAGE	3.55%	4.12%	4.22%	4.12%	4.18%	3.67%	3.41%	2.93%
COLLEGE GRANT PER COST	AVERAGE	2.68%	2.49%	2.79%	2.63%	2.68%	2.53%	2.63%	2.57%
OTHER GRANT PER COST	AVERAGE	1.30%	1.17%	1.21%	1.14%	1.25%	1.39%	1.27%	1.37%
GSL PER COST	AVERAGE	8.02%	6.68%	6.60%	6.91%	7.65%	8.25%	8.62%	8.63%
NDSL PER COST	AVERAGE	1.89%	1.51%	1.42%	1.82%	1.75%	1.99%	1.92%	2.08%
COLLEGE LOAN PER COST	AVERAGE	0.83%	0.68%	0.82%	0.74%	0.65%	0.83%	0.93%	0.91%
OTHER LOAN PER COST	AVERAGE	1.08%	0.66%	0.89%	0.68%	0.74%	1.18%	1.03%	1.17%
CWS PER COST	AVERAGE	2.45%	2.74%	2.82%	2.78%	2.55%	2.63%	2.34%	2.14%
PT WORK PER COST	AVERAGE	2.80%	2.82%	2.58%	2.98%	2.69%	2.92%	2.88%	2.97%
FT WORK PER COST	AVERAGE	0.33%	0.54%	0.37%	0.52%	0.18%	0.34%	0.31%	0.27%
SUMMER WORK PER COST	AVERAGE	4.67%	3.18%	3.34%	4.04%	4.09%	4.73%	5.08%	5.48%
SAVINGS PER COST	AVERAGE	2.15%	1.55%	1.89%	1.53%	1.76%	1.98%	2.52%	2.53%
SPOUSE PER COST	AVERAGE	0.11%	0.14%	0.14%	0.15%	0.09%	0.10%	0.10%	0.10%
GI PER COST	AVERAGE	0.11%	0.17%	0.05%	0.12%	0.11%	0.05%	0.21%	0.09%
PARENTS GI PER COST	AVERAGE	0.26%	0.30%	0.33%	0.28%	0.28%	0.23%	0.28%	0.26%
SOCIAL SECURITY PER COST	AVERAGE	1.21%	1.65%	1.68%	1.43%	1.30%	1.32%	1.15%	0.88%

Table 9B
Average Percent of Cost by Income

		INCOME (000)						
		20-25	25-30	30-35	35-40	40-50	50-100	over 100
PELL PER COST	AVERAGE	4.02	3.54	1.71	1.34	0.99	0.60	0.44
SEOG PER COST	AVERAGE	0.69	0.50	0.34	0.28	0.17	0.09	0.05
STATE GRANT PER COST	AVERAGE	2.41	1.86	1.46	1.20	0.97	0.66	0.32
COLLEGE GRANT PER COST	AVERAGE	2.44	2.33	2.26	2.08	1.76	1.26	0.63
OTHER GRANT PER COST	AVERAGE	1.38	1.23	1.20	1.10	1.07	0.75	0.62
GSL PER COST	AVERAGE	9.12	7.58	6.31	6.04	4.85	2.73	0.83
NDSL PER COST	AVERAGE	1.75	1.71	1.25	0.87	0.71	0.29	0.06
COLLEGE LOAN PER COST	AVERAGE	1.01	1.12	1.07	0.95	0.96	0.62	0.28
OTHER LOAN PER COST	AVERAGE	1.21	1.34	1.39	1.32	1.07	0.88	0.31
CWS PER COST	AVERAGE	1.94	1.59	1.31	0.99	0.76	0.39	0.28
PT WORK PER COST	AVERAGE	3.33	3.35	3.31	2.98	2.59	1.78	0.82
FT WORK PER COST	AVERAGE	0.38	0.34	0.26	0.22	0.27	0.22	0.11
SUMMER WORK PER COST	AVERAGE	6.14	6.89	7.39	7.38	7.89	6.31	3.83
SAVINGS PER COST	AVERAGE	2.67	2.75	2.89	3.21	3.17	2.63	2.03
SPOUSE PER COST	AVERAGE	0.13	0.11	0.14	0.07	0.11	0.19	0.16
AI PER COST	AVERAGE	0.07	0.08	0.04	0.05	0.05	0.05	0.01
PARENTS GI PER COST	AVERAGE	0.19	0.19	0.11	0.12	0.12	0.06	0.04
SOCIAL SECURITY PER COST	AVERAGE	0.56	0.43	0.30	0.20	0.20	0.20	0.20

Table 10A

Average Dollar by Educational Costs

		Educational Costs (000)					
		Under 4	2 -2.5	2.5-3	3-3.5	3.5-4	4-4.5
PELL	AVERAGE	169.59	198.43	156.17	164.50	169.36	180.80
SEOG	AVERAGE	21.06	15.62	15.04	17.12	23.40	25.62
STATE GRANT	AVERAGE	66.86	91.46	48.36	59.40	69.68	79.80
COLLEGE GRANT	AVERAGE	47.96	113.44	56.44	38.59	43.15	66.12
OTHER GRANT	AVERAGE	38.94	13.60	37.28	29.65	35.88	52.88
GSL	AVERAGE	210.24	28.76	83.52	186.94	235.80	352.35
NDSL	AVERAGE	42.25	1.68	13.03	28.87	39.74	81.82
COLLEGE LOAN	AVERAGE	38.48	28.75	13.78	19.13	37.18	43.27
OTHER LOAN	AVERAGE	35.83	2.68	16.54	22.97	48.25	54.83
CWS	AVERAGE	45.36	81.40	43.74	38.81	48.66	57.36
PT WORK	AVERAGE	125.86	74.83	127.94	173.70	188.85	93.87
FT WORK	AVERAGE	14.48	12.22	15.84	17.38	13.32	11.76
SUMMER WORK	AVERAGE	233.37	89.61	169.73	171.89	238.60	323.28
SAVING	AVERAGE	188.48	45.33	76.31	76.25	186.43	131.53
SPOUSE	AVERAGE	5.31	19.55	6.90	6.61	4.92	3.42
GI	AVERAGE	3.45	1.48	3.94	4.77	3.22	2.11
PARENTS GI	AVERAGE	7.84	0.88	6.65	10.03	9.15	4.90
SOCIAL SECURITY	AVERAGE	23.21	11.55	25.42	21.77	23.53	23.58

Table 108
Average Dollar by Educational Costs

		Educational Costs (000)						
		4.5or$	3-3.5	3.5-4	4-4.5	4.5-5	5-5.5	5.5-6
PELL	AVERAGE	174.54	211.73	257.15	307.30	356.56	338.61	327.34
SEOG	AVERAGE	28.98	41.56	49.73	70.02	62.98	87.78	87.72
STATE GRANT	AVERAGE	87.44	113.57	125.58	199.72	201.45	213.91	254.19
COLLEGE GRANT	AVERAGE	45.97	103.63	119.75	207.37	278.14	348.31	468.83
OTHER GRANT	AVERAGE	52.64	64.28	70.31	80.22	87.48	90.99	98.61
GSL	AVERAGE	449.95	362.72	579.53	596.83	588.77	670.45	723.38
NDSL	AVERAGE	67.14	87.77	90.28	146.75	83.22	137.34	127.09
COLLEGE LOAN	AVERAGE	48.29	49.93	67.75	75.08	70.59	71.22	56.25
OTHER LOAN	AVERAGE	69.98	60.98	88.97	97.34	80.56	77.77	101.99
CWS	AVERAGE	94.20	100.16	113.94	165.97	115.80	177.30	179.83
PT WORK	AVERAGE	137.75	84.77	72.94	96.64	228.30	139.46	118.56
FT WORK	AVERAGE	11.85	6.65	5.08	6.19	20.91	15.75	15.20
SUMMER WORK	AVERAGE	291.15	397.98	376.09	322.12	267.96	382.73	388.85
SAVING	AVERAGE	127.99	168.78	161.78	132.72	118.71	148.73	159.88
SPOUSE	AVERAGE	3.91	6.64	2.33	7.53	7.96	6.68	3.93
GI	AVERAGE	2.32	2.12	3.95	2.21	2.74	5.57	1.51
PARENTS GI	AVERAGE	5.52	10.68	7.68	4.10	6.96	5.88	4.61
SOCIAL SECURITY	AVERAGE	29.13	32.79	37.54	34.44	30.91	30.81	28.85

Table 15C
Average Dollar by Educational Costs

		Educational Costs (000)										
		8-8.5	8.5-9	9-9.5	9.5-10	10-10.5	10.5-11	11-11.5	11.5-12	12-12.5	12.6-13	13-13.5
PELL	AVERAGE	338.62	283.92	219.13	219.91	179.86	223.78	135.67	195.50	161.16	179.45	125.91
SEOG	AVERAGE	89.95	91.42	67.27	67.81	77.13	59.58	56.87	100.35	66.47	230.99	8.15
STATE GRANT	AVERAGE	232.48	252.34	201.48	114.34	118.41	152.46	88.02	161.66	71.10	118.73	252.52
COLLEGE GRANT	AVERAGE	495.26	544.39	506.77	544.80	505.10	672.66	619.46	659.94	718.58	898.88	925.44
OTHER GRANT	AVERAGE	189.86	118.17	193.14	117.48	142.63	129.76	161.97	142.38	179.79	318.67	392.85
GSL	AVERAGE	787.73	635.71	622.93	608.62	489.31	748.56	678.31	647.37	767.78	799.83	643.13
NDSL	AVERAGE	113.18	141.75	115.84	117.92	112.34	141.71	128.48	108.23	87.54	78.67	133.22
COLLEGE LOAN	AVERAGE	69.37	68.76	77.86	79.58	72.18	99.18	68.35	89.16	118.93	108.77	166.88
OTHER LOAN	AVERAGE	79.65	86.63	98.46	84.16	57.88	114.28	111.62	108.89	118.69	98.43	98.13
CWS	AVERAGE	214.84	225.48	215.38	230.63	179.81	165.49	189.59	245.73	296.53	369.87	320.41
PT WORK	AVERAGE	108.85	94.62	82.91	73.47	49.51	93.81	51.48	73.31	56.75	78.84	108.78
FT WORK	AVERAGE	8.24	8.71	9.28	4.24	5.74	9.74	4.96	4.89	1.37	4.48	6.63
SUMMER WORK	AVERAGE	446.41	376.28	509.83	419.38	431.17	482.77	483.21	442.45	517.28	508.16	619.43
SAVING	AVERAGE	173.36	168.34	209.55	188.82	182.69	218.18	243.64	284.58	248.64	288.91	344.69
SPOUSE	AVERAGE	2.29	6.39	5.29	5.44	3.83	6.09	4.82	4.29	1.72	1.12	8.88
AT	AVERAGE	4.19	8.86	6.38	1.46	3.84	8.56	1.73	1.25	8.88	1.68	4.63
PARENTS AT	AVERAGE	4.67	5.93	1.75	5.58	2.44	5.46	6.97	4.82	3.94	4.88	5.79
SOCIAL SECURITY	AVERAGE	28.92	30.29	23.86	26.74	24.97	23.79	27.18	33.26	26.27	28.33	24.86

Table 11
Average Dollar by High School Rank

			HIGH SCHOOL RANK				
		TOTAL	Lower 20th	20-40th	40-60th	60-80th	Upper 20th
PELL	AVERAGE	282.96	189.82	198.48	284.11	280.84	284.21
SEOG	AVERAGE	37.91	42.21	37.45	32.22	35.89	43.19
STATE GRANT	AVERAGE	104.46	59.13	65.61	68.59	86.63	146.99
COLLEGE GRANT	AVERAGE	139.84	57.66	54.38	59.48	92.08	238.96
OTHER GRANT	AVERAGE	61.64	15.18	27.04	23.84	36.47	109.74
GSL	AVERAGE	369.94	318.97	293.16	352.47	384.55	385.78
NDSL	AVERAGE	69.83	41.96	57.74	62.02	63.11	81.56
COLLEGE LOAN	AVERAGE	45.94	63.57	39.09	47.76	45.52	45.43
OTHER LOAN	AVERAGE	56.99	29.68	50.73	56.53	59.41	57.34
CWS	AVERAGE	84.85	66.72	53.28	60.75	76.49	111.88
PT WORK	AVERAGE	120.49	93.43	113.58	124.94	120.45	114.18
FT WORK	AVERAGE	12.18	12.47	15.38	14.78	12.42	9.78
SUMMER WORK	AVERAGE	297.13	179.25	212.37	246.29	301.77	345.26
SAVING	AVERAGE	127.85	129.58	91.43	102.78	123.45	153.56
SPOUSE	AVERAGE	5.89	10.56	7.82	7.87	3.91	3.28
GI	AVERAGE	2.98	17.52	7.47	4.18	2.88	1.76
PARENTS GI	AVERAGE	7.13	13.83	10.88	8.24	7.51	5.46
SOCIAL SECURITY	AVERAGE	26.96	38.12	28.64	26.24	27.63	26.82

Table 12
Average Percent of Cost by High School Rank

			HIGH SCHOOL RANK				
		TOTAL	Lower 20th	20th-40	40th-60	60th-80	Upper 20th
PELL PER COST	AVERAGE	4.30%	3.99%	4.47%	4.52%	4.33%	4.11%
SEOG PER COST	AVERAGE	0.78%	0.98%	0.79%	0.67%	0.69%	0.71%
STATE GRANT PER COST	AVERAGE	2.03%	1.24%	1.45%	1.42%	1.75%	2.73%
COLLEGE GRANT PER COST	AVERAGE	2.15%	1.07%	1.01%	1.06%	1.50%	3.50%
OTHER GRANT PER COST	AVERAGE	1.16%	0.28%	0.58%	0.48%	0.75%	2.08%
GSL PER COST	AVERAGE	7.04%	6.25%	6.87%	7.31%	7.53%	6.71%
NDSL PER COST	AVERAGE	1.32%	0.81%	1.17%	1.28%	1.22%	1.42%
COLLEGE LOAN PER COST	AVERAGE	0.98%	1.32%	0.79%	1.03%	0.98%	0.80%
OTHER LOAN PER COST	AVERAGE	1.12%	0.65%	1.07%	1.20%	1.17%	1.04%
CWS PER COST	AVERAGE	1.53%	1.33%	1.18%	1.22%	1.46%	1.85%
PT WORK PER COST	AVERAGE	2.81%	2.22%	2.98%	3.08%	2.99%	2.91%
FT WORK PER COST	AVERAGE	0.29%	0.27%	0.38%	0.37%	0.31%	0.22%
SUMMER WORK PER COST	AVERAGE	6.18%	3.98%	4.79%	5.49%	6.37%	6.62%
SAVINGS PER COST	AVERAGE	2.63%	3.08%	2.08%	2.29%	2.63%	2.94%
SPOUSE PER COST	AVERAGE	0.12%	0.28%	0.19%	0.19%	0.09%	0.07%
GI PEP COST	AVERAGE	0.07%	0.58%	0.19%	0.18%	0.05%	0.04%
PARENTS GI PER COST	AVERAGE	0.17%	0.32%	0.26%	0.20%	0.17%	0.12%
SOCIAL SECURITY PER COST	AVERAGE	0.59%	0.48%	0.67%	0.61%	0.61%	0.54%

Table 13
Average Dollar by Various Characteristics

		STATUS		SEX		CONTROL		LEVEL	
		Resident	Commuter	Male	Female	Public	Private	Univ.	4-year	2-year
PELL	AVERAGE	229.04	171.96	194.21	211.51	168.86	309.78	150.75	254.14	178.29
SEOG	AVERAGE	47.42	24.68	36.36	39.43	24.84	78.98	39.39	49.98	25.17
STATE GRANT	AVERAGE	120.21	82.54	98.99	109.81	74.98	192.81	101.75	138.87	81.16
COLLEGE GRANT	AVERAGE	195.76	62.00	135.08	144.58	58.52	484.28	173.62	216.72	44.88
OTHER GRANT	AVERAGE	79.12	37.18	59.47	63.76	46.77	105.69	97.03	65.91	36.39
GSL	AVERAGE	451.95	256.33	365.82	373.98	294.78	592.41	327.96	487.84	358.85
NDSL	AVERAGE	92.96	37.63	64.49	75.86	53.63	117.79	76.24	76.89	59.93
COLLEGE LOAN	AVERAGE	56.38	31.41	46.86	43.88	37.56	78.74	44.18	58.23	42.81
OTHER LOAN	AVERAGE	72.59	35.27	54.26	59.66	48.42	82.36	59.82	61.99	50.91
CWS	AVERAGE	115.17	42.63	79.41	90.16	58.26	187.28	107.87	112.52	44.19
PT WORK	AVERAGE	69.42	191.59	129.29	111.89	124.08	109.86	99.44	117.68	135.77
FT WORK	AVERAGE	7.44	18.79	15.24	9.28	12.34	11.73	8.04	14.62	12.28
SUMMER WORK	AVERAGE	366.57	200.45	319.42	255.75	278.58	352.82	401.45	295.71	236.34
SAVING	AVERAGE	133.75	91.88	132.73	123.87	119.96	191.28	172.73	121.98	106.98
SPOUSE	AVERAGE	4.58	5.81	6.24	5.97	4.61	6.93	3.45	5.88	5.39
GI	AVERAGE	1.66	4.81	4.88	1.12	3.81	2.87	1.73	2.16	4.38
PARENTS GI	AVERAGE	7.17	7.07	7.57	6.69	6.92	7.74	6.89	7.35	7.53
SOCIAL SECURITY	AVERAGE	27.89	25.67	24.47	29.48	25.58	31.17	26.42	27.72	26.42

Table 14
Average Percent of Cost by Various Characteristics

SAS

		STATUS		SEX		CONTROL		LEVEL		
		Resident	Commuter	Male	Female	Public	Private	Univ.	4-year	2-year
PELL PER COST	AVERAGE	4.38%	4.28%	4.05%	4.55%	4.21%	4.58%	3.07%	5.09%	4.27%
SEOG PER COST	AVERAGE	0.79%	0.57%	0.67%	0.72%	0.58%	1.05%	0.60%	0.89%	0.56%
STATE GRANT PER COST	AVERAGE	2.14%	1.89%	1.91%	2.1[illegible]%	1.82%	2.66%	1.81%	2.29%	1.92%
COLLEGE GRANT PER COST	AVERAGE	2.91%	1.24%	2.09%	2.21%	1.22%	4.92%	2.37%	3.23%	0.98%
OTHER GRANT PER COST	AVERAGE	1.36%	0.98%	1.18%	1.23%	1.12%	1.29%	1.66%	1.14%	0.89%
BSL PER COST	AVERAGE	8.06%	5.61%	6.99%	7.09%	6.81%	7.71%	5.60%	6.86%	8.07%
NDSL PER COST	AVERAGE	1.66%	0.83%	1.20%	1.43%	1.24%	1.54%	1.25%	1.32%	1.38%
COLLEGE LOAN PER COST	AVERAGE	1.02%	0.73%	0.95%	0.85%	0.89%	0.92%	0.75%	0.87%	1.01%
OTHER LOAN PER COST	AVERAGE	1.34%	0.88%	1.07%	1.16%	1.13%	1.08%	1.09%	1.11%	1.16%
CWS PER COST	AVERAGE	1.91%	0.99%	1.43%	1.62%	1.28%	2.08%	1.78%	1.93%	1.83%
PT WORK PER COST	AVERAGE	1.33%	4.87%	2.95%	2.67%	3.24%	1.53%	2.87%	2.46%	3.68%
FT WORK PER COST	AVERAGE	0.15%	0.49%	0.36%	0.23%	0.33%	0.18%	0.17%	0.32%	0.34%
SUMMER WORK PER COST	AVERAGE	6.91%	4.97%	7.01%	5.22%	6.66%	4.46%	7.59%	5.54%	5.76%
SAVINGS PER COST	AVERAGE	2.87%	2.38%	2.72%	2.54%	2.88%	1.89%	3.23%	2.28%	2.61%
SPOUSE PER COST	AVERAGE	0.09%	0.15%	0.14%	0.10%	0.12%	0.10%	0.07%	0.12%	0.14%
GI PER COST	AVERAGE	0.03%	0.13%	0.12%	0.03%	0.08%	0.04%	0.04%	0.05%	0.11%
PARENTS GI PER COST	AVERAGE	0.15%	0.19%	0.18%	0.16%	0.18%	0.12%	0.17%	0.16%	0.20%
SOCIAL SECURITY PER COST	AVERAGE	0.59%	0.65%	0.59%	0.64%	0.63%	0.44%	0.53%	0.56%	0.64%

Table 15
Average Dollar by Reduced Income Categories

			INCOME 1000					
		TOTAL	0-10	10-15	15-25	25-40	40-100	over 100
PELL	AVERAGE	202.96	618.42	455.60	246.13	96.67	43.81	24.80
SEOG	AVERAGE	37.91	101.47	78.82	47.41	23.08	8.51	3.83
STATE GRANT	AVERAGE	104.46	201.42	176.33	134.61	82.45	43.50	18.66
COLLEGE GRANT	AVERAGE	139.84	149.91	157.31	158.91	151.68	105.72	40.71
OTHER GRANT	AVERAGE	61.64	56.37	66.86	69.19	63.23	55.68	36.25
GSL	AVERAGE	369.94	359.29	426.60	456.12	426.38	224.95	55.47
NDSL	AVERAGE	69.83	85.39	101.27	98.68	78.82	27.66	4.86
COLLEGE LOAN	AVERAGE	45.94	34.08	42.26	47.18	53.84	45.84	14.62
OTHER LOAN	AVERAGE	56.99	36.16	51.95	58.64	67.99	55.89	21.28
CWS	AVERAGE	84.85	133.88	138.15	111.28	78.17	36.72	10.58
PT WORK	AVERAGE	120.49	104.38	121.31	132.61	139.18	99.03	42.23
FT WORK	AVERAGE	12.18	15.61	12.67	14.88	11.71	10.37	5.88
SUMMER WORK	AVERAGE	297.13	166.88	222.65	273.39	345.35	351.21	234.37
SAVING	AVERAGE	127.85	74.48	99.91	119.29	141.47	153.33	123.29
SPOUSE	AVERAGE	5.09	5.83	3.59	4.76	4.73	6.19	8.41
OI	AVERAGE	2.98	4.85	4.79	2.95	2.59	2.28	0.58
PARENTS OI	AVERAGE	7.13	10.82	11.85	9.39	5.81	4.88	2.18
SOCIAL SECURITY	AVERAGE	26.96	66.84	56.88	31.41	15.96	10.34	9.86

Table 16
Average Percent of Cost by Reduced Income Categories

		INCOME (000)						
	TOTAL	0	10-15	15-25	25-40	40-100	over 100
PELL PER COST	AVERAGE	4.30%	13.77%	9.92%	5.17%	1.91%	0.79%	0.44%
SEOG PER COST	AVERAGE	0.78%	2.07%	1.52%	0.84%	0.38%	0.13%	0.05%
STATE GRANT PER COST	AVERAGE	2.83%	4.14%	3.54%	2.62%	1.54%	0.81%	0.32%
COLLEGE GRANT PER COST	AVERAGE	2.15%	2.64%	2.58%	2.49%	2.24%	1.51%	0.63%
OTHER GRANT PER COST	AVERAGE	1.16%	1.28%	1.33%	1.38%	1.19%	0.98%	0.62%
OSL PER COST	AVERAGE	7.84%	7.81%	8.43%	8.92%	8.17%	3.76%	0.83%
NDSL PER COST	AVERAGE	1.32%	1.63%	1.96%	1.88%	1.32%	0.49%	0.86%
COLLEGE LOAN PER COST	AVERAGE	0.98%	0.69%	0.88%	0.97%	1.05%	0.79%	0.28%
OTHER LOAN PER COST	AVERAGE	1.12%	0.74%	1.11%	1.20%	1.35%	0.97%	0.31%
CWS PER COST	AVERAGE	1.53%	2.69%	2.49%	2.02%	1.33%	0.57%	0.28%
PT WORK PER COST	AVERAGE	2.81%	2.54%	2.98%	3.18%	3.24%	2.18%	0.82%
FT WORK PER COST	AVERAGE	0.29%	0.39%	0.33%	0.33%	0.28%	0.24%	0.11%
SUMMER WORK PER COST	AVERAGE	6.10%	3.68%	4.98%	5.87%	7.19%	6.69%	3.83%
SAVINGS PER COST	AVERAGE	2.63%	1.68%	2.25%	2.61%	2.93%	2.89%	2.83%
SPOUSE PER COST	AVERAGE	0.12%	0.13%	0.10%	0.12%	0.11%	0.13%	0.16%
GI PER COST	AVERAGE	0.07%	0.12%	0.13%	0.07%	0.06%	0.05%	0.01%
PARENTS GI PER COST	AVERAGE	0.17%	0.27%	0.25%	0.22%	0.14%	0.09%	0.04%
SOCIAL SECURITY PER COST	AVERAGE	0.59%	1.58%	1.23%	0.69%	0.34%	0.20%	0.20%

Table 17
Average Dollar by Reduced Educational Cost Categories

SAS

		Educational Cost (000)					
		TOTAL	2-4.5	4.5-5.5	5.5-7.5	7.5-9	over 9
PELL	AVERAGE	202.96	169.39	194.23	318.88	304.36	191.69
SEOG	AVERAGE	37.91	21.86	33.17	66.68	89.66	85.85
STATE GRANT	AVERAGE	104.46	66.86	96.14	180.99	266.22	142.21
COLLEGE GRANT	AVERAGE	139.84	47.96	65.15	234.58	501.93	635.51
OTHER GRANT	AVERAGE	61.64	38.94	57.15	81.78	186.89	172.51
GSL	AVERAGE	369.94	210.24	420.94	608.78	689.68	648.13
NDSL	AVERAGE	69.83	42.25	74.88	111.18	134.68	128.13
COLLEGE LOAN	AVERAGE	45.94	30.48	48.58	78.66	64.66	89.41
OTHER LOAN	AVERAGE	56.99	35.83	66.99	85.46	89.61	94.81
CWS	AVERAGE	84.85	45.36	69.49	140.31	205.98	234.68
PT WORK	AVERAGE	120.49	125.86	120.13	132.38	104.53	75.84
FT WORK	AVERAGE	12.18	14.48	18.12	11.93	10.79	5.74
SUMMER WORK	AVERAGE	297.13	233.37	326.66	342.11	418.26	473.38
SAVING	AVERAGE	127.85	100.48	148.63	142.74	167.89	218.66
SPOUSE	AVERAGE	5.09	5.31	4.82	5.77	4.19	4.14
GI	AVERAGE	2.98	3.45	2.25	3.77	2.18	1.58
PARENTS GI	AVERAGE	7.13	7.84	7.23	6.35	5.86	4.56
SOCIAL SECURITY	AVERAGE	26.96	23.21	30.35	33.68	30.65	26.25

Table 1[a]
Average Income by Reduced Categories of other Characteristics

			HIGH SCHOOL RANK		LEVEL	
		TOTAL	Lower Quintile	Upper Quintile	4-year or more	2-year
PELL	AVERAGE	202.96	202.10	204.21	218.67	178.29
SEOG	AVERAGE	37.91	34.28	43.19	46.84	25.17
STATE GRANT	AVERAGE	104.46	75.28	146.99	119.31	81.16
COLLEGE GRANT	AVERAGE	139.84	71.74	238.96	200.35	44.88
OTHER GRANT	AVERAGE	61.64	28.59	109.74	77.73	36.39
GSL	AVERAGE	367.94	359.12	385.78	377.81	358.85
NDSL	AVERAGE	69.83	61.78	81.56	76.14	59.93
COLLEGE LOAN	AVERAGE	45.94	46.29	45.43	47.93	42.81
OTHER LOAN	AVERAGE	56.99	56.75	57.34	60.86	50.91
CWS	AVERAGE	84.85	66.33	111.80	110.75	44.19
PT WORK	AVERAGE	120.49	120.83	114.18	110.76	135.77
FT WORK	AVERAGE	12.18	13.84	9.78	12.13	12.28
SUMMER WORK	AVERAGE	297.13	264.05	345.26	335.86	236.34
SAVING	AVERAGE	127.85	118.19	153.56	141.28	106.98
SPOUSE	AVERAGE	5.89	6.34	3.28	4.91	8.39
GI	AVERAGE	2.98	3.81	1.76	2.13	4.30
PARENTS GI	AVERAGE	7.13	8.27	5.46	6.87	7.53
SOCIAL SECURITY	AVERAGE	26.96	27.86	26.82	27.31	26.42

Table 19
Average Income by Reduced Categories of other Characteristics

			HIGH SCHOOL RANK		LEVEL	
		TOTAL	Lower Quintile	Upper Quintile	4-year or more	2-year
PELL PER COST	AVERAGE	4.28	4.44	4.11	4.33	4.27
SEOG PER COST	AVERAGE	0.70	0.69	0.71	0.78	0.56
STATE GRANT PER COST	AVERAGE	2.03	1.55	2.73	2.11	1.92
COLLEGE GRANT PER COST	AVERAGE	2.15	1.23	3.50	2.98	0.98
OTHER GRANT PER COST	AVERAGE	1.16	0.59	2.00	1.34	0.89
GSL PER COST	AVERAGE	7.04	7.27	6.71	6.38	8.07
NDSL PER COST	AVERAGE	1.32	1.24	1.42	1.29	1.35
COLLEGE LOAN PER COST	AVERAGE	0.90	0.96	0.80	0.82	1.01
OTHER LOAN PER COST	AVERAGE	1.12	1.17	1.04	1.09	1.16
CWS PER COST	AVERAGE	1.53	1.31	1.85	1.84	1.03
PT WORK PER COST	AVERAGE	2.81	3.02	2.51	2.31	3.60
FT WORK PER COST	AVERAGE	0.29	0.34	0.22	0.26	0.34
SUMMER WORK PER COST	AVERAGE	6.10	5.75	6.62	6.32	5.76
SAVINGS PER COST	AVERAGE	2.63	2.42	2.94	2.64	2.61
SPOUSE PER COST	AVERAGE	0.12	0.15	0.07	0.10	0.14
GI PER COST	AVERAGE	0.07	0.09	0.04	0.05	0.11
PARENTS GI PER COST	AVERAGE	0.17	0.20	0.12	0.15	0.20
SOCIAL SECURITY PER COST	AVERAGE	0.59	0.61	0.54	0.55	0.64

Table 20

Least Squares Means for Income
(000)

Average Dollar	<4	4-6	6-8	8-10	10-12.5	12.5-15	15-20	20-25	25-30	30-35	35-40	40-50	50-100	100 Or More
PELL	635.75	659.30	632.78	558.63	499.84	403.54	318.58	192.15	120.68	79.12	59.74	37.30	3.06	-27.76
SEOG	141.02	144.48	133.55	118.84	114.34	104.48	88.84	69.81	58.63	48.38	42.90	33.77	19.31	1.54
State Grant	233.53	235.28	231.45	230.94	208.46	193.74	173.18	146.42	117.94	97.64	80.32	64.93	36.83	3.86
College Grant	385.12	402.41	391.01	393.31	384.36	393.77	390.99	383.80	377.92	367.83	346.22	313.46	216.63	65.81
Other Grant	104.89	107.65	101.71	105.50	112.58	106.21	108.97	109.21	101.66	98.76	92.53	91.55	64.10	34.76
GSL	608.12	601.04	621.78	646.64	665.36	672.64	678.04	700.81	710.57	646.87	536.84	467.62	317.24	129.60
NDSL	118.30	116.17	135.45	132.69	139.28	137.02	144.10	127.17	122.45	97.67	76.81	61.49	29.19	-1.23
College Loan	64.34	76.95	70.72	67.24	74.94	77.17	77.03	82.83	86.83	84.87	79.95	80.37	62.58	28.36
Other Loan	54.45	64.26	56.33	59.64	75.41	69.79	77.81	80.15	84.95	87.98	82.80	72.83	60.57	21.58
CWS	211.88	214.52	208.79	205.84	208.93	196.67	189.03	179.26	160.72	142.88	121.78	101.24	54.41	.74
PT Work	102.17	111.25	134.71	127.65	135.58	138.70	139.67	151.46	157.83	162.27	150.77	139.90	115.70	79.02
FT Work	18.92	13.46	18.04	6.99	11.46	11.61	10.36	14.51	12.71	11.07	8.92	10.91	10.63	6.13
Summer Work	250.80	255.62	280.30	280.84	301.39	317.92	333.33	359.02	389.75	412.34	408.35	398.44	355.44	222.54
Savings	131.23	143.42	129.92	139.55	144.66	167.06	167.38	173.56	179.72	185.18	197.99	197.56	173.65	138.46
Spouse	5.60	4.18	4.60	3.45	3.31	3.44	4.22	5.15	4.65	6.31	3.72	5.64	7.72	8.87
GI	11.15	6.12	9.25	8.37	6.14	11.69	7.24	6.75	7.45	5.98	6.67	6.61	6.42	4.49
GI Parent	9.31	12.50	9.20	6.24	8.99	10.23	10.57	6.53	6.47	3.53	3.92	4.23	1.55	.61
Social Security	76.30	83.83	68.87	63.58	64.33	58.18	45.05	30.39	24.20	18.90	16.40	13.24	12.35	9.83
Percent of Cost														
PELL	14.50	14.59	14.17	12.19	10.87	8.67	6.75	3.89	2.40	1.53	1.14	.75	.25	-.04
SEOG	2.48	2.49	2.20	1.93	1.84	1.57	1.25	.88	.68	.50	.43	.29	.14	-.02
State Grant	4.12	4.23	4.06	4.00	3.55	3.29	2.79	2.25	1.68	1.27	1.01	.76	.03	-.07
College Grant	3.09	3.49	3.26	3.24	3.05	3.15	3.10	2.92	2.79	2.63	2.39	1.97	1.06	-.20
Other Grant	1.11	1.14	1.00	1.08	1.20	1.05	1.13	1.12	.96	.89	.78	.73	.35	.22
GSL	6.47	6.38	6.62	7.36	7.89	8.19	8.25	8.81	9.19	7.85	5.58	4.32	2.04	-.06
NDSL	1.46	1.39	1.77	1.68	1.92	1.83	2.00	1.68	1.62	1.11	.73	.52	.02	-.29
College Loan	.64	.87	.78	.69	.87	.96	.95	1.05	1.15	1.09	.98	.98	.63	.19
Other Loan	.81	.75	.53	.59	1.04	.88	1.02	1.08	1.19	1.22	1.15	.88	.68	.10
CWS	3.05	3.19	3.03	2.87	2.93	2.64	2.44	2.23	1.86	1.53	1.16	.85	.27	-.20
PT Work	1.80	2.14	2.69	2.42	2.67	2.67	2.75	3.09	3.18	3.28	3.01	2.77	2.29	1.16
FT Work	.52	.34	.49	.16	.32	.30	.26	.37	.33	.27	.23	.29	.27	.19
Summer Work	2.33	2.63	3.08	3.16	3.73	3.97	4.30	4.86	5.53	5.96	5.82	5.53	4.77	2.64
Savings	1.43	1.80	1.36	1.59	1.80	2.30	2.28	2.41	2.46	2.58	2.89	2.83	2.33	1.90
Spouse	.16	.16	.17	.12	.13	.13	.13	.16	.14	.18	.11	.15	.20	.21
GI	.28	.14	.21	.20	.14	.31	.18	.16	.18	.14	.16	.16	.16	.11
GI Parent	.33	.36	.31	.23	.26	.31	.30	.22	.22	.15	.15	.16	.10	.08
Social Security	1.63	1.65	1.41	1.28	1.30	1.13	.86	.54	.40	.28	.26	.18	.19	.20

Table 21

Least Squares Means for College Cost
(000)

	2-2.5	2.5-3	3-3.5	3.5-4	4-4.5	4.5-5	5-5.5	5.5-6	6-6.5	6.5-7	7.7.5
PELL	184.88	307.15	331.06	335.67	345.33	356.10	345.62	337.86	376.78	365.51	333.97
SEOG	13.52	40.31	45.18	50.56	52.18	59.42	59.23	65.32	78.48	68.85	92.97
State Grant	63.02	65.91	87.72	98.75	104.68	111.65	126.45	126.36	185.89	183.68	196.84
College Grant	106.15	75.49	67.90	70.69	69.34	59.98	82.16	75.77	145.10	194.01	259.83
Other Grant	11.16	31.32	33.45	29.19	32.25	42.34	37.60	49.10	58.33	72.56	76.54
GSL	-80.25	-5.48	-6.88	137.61	256.72	329.44	320.85	502.47	585.71	642.47	697.92
NDSL	-12.26	12.51	18.78	35.10	70.89	60.26	75.29	74.22	135.69	88.75	132.56
College Loan	24.42	13.07	15.47	33.03	37.02	41.59	45.72	59.72	73.32	73.48	68.38
Other Loan	2.29	9.15	13.11	26.28	33.12	54.07	42.01	66.95	83.56	78.57	65.10
CWS	105.45	97.98	95.65	100.24	92.54	107.80	101.27	109.15	139.77	82.57	132.54
PT Work	-9.09	66.20	107.83	75.03	104.82	107.46	114.69	115.15	131.85	214.04	186.63
FT Work	9.01	15.94	17.52	16.08	18.19	15.44	12.84	10.91	9.05	15.78	15.84
Summer Work	90.13	78.96	87.58	112.88	155.97	161.91	258.06	268.79	288.21	273.75	383.35
Savings	45.91	43.65	45.32	62.85	74.21	81.68	122.53	132.38	130.92	140.68	168.09
Spouse	23.61	10.91	10.35	8.78	7.48	7.86	9.21	3.90	7.25	5.86	3.98
GI	3.35	6.48	6.83	6.12	6.53	5.48	6.82	9.11	7.20	6.29	10.57
GI Parent	4.82	14.04	17.70	16.23	11.45	12.89	14.06	9.98	3.93	5.46	2.95
Social Security	3.10	33.57	30.58	33.56	35.77	41.64	43.85	49.58	45.04	43.00	44.55

Table 21 (continued)

Least Squares Means for College Cost
(000)

7.5-8	8-8.5	8.5-9	9-9.5	9.5-10	10-10.5	10.5-11	11-11.5	11.5-12	12-12.5	12.5-13	13-13.5
331.86	327.88	315.35	266.60	281.98	262.15	275.84	221.35	258.60	240.96	249.82	202.80
95.45	100.46	104.46	82.39	86.64	101.41	77.39	78.59	118.55	89.91	252.20	26.33
236.98	279.51	245.05	192.82	140.46	126.17	151.39	82.62	162.93	62.88	107.99	235.56
383.46	406.82	467.21	424.06	487.34	498.65	596.33	557.14	600.62	636.83	808.99	832.63
83.74	86.96	92.69	162.17	101.76	118.12	111.27	124.36	112.83	141.09	263.44	329.26
763.88	787.88	734.53	747.98	739.58	681.38	852.48	870.46	807.76	942.15	992.69	846.72
125.90	137.53	153.29	125.58	136.03	136.66	154.89	148.06	201.84	106.21	96.38	145.90
55.64	71.65	72.27	83.19	85.26	84.19	97.50	79.68	97.57	151.91	121.15	180.94
91.43	71.27	79.63	88.76	78.95	56.60	107.64	109.59	103.57	107.44	90.16	97.77
140.83	172.45	191.41	177.31	207.33	160.78	137.33	160.54	212.51	270.79	337.61	275.00
152.06	148.54	143.22	145.05	132.22	121.65	158.43	126.60	147.48	133.87	155.02	255.08
15.61	8.29	9.03	11.47	5.43	9.20	11.04	9.24	8.82	6.33	8.95	12.28
399.85	431.37	392.55	469.08	405.18	412.13	460.74	430.40	411.63	496.52	494.79	537.57
180.36	186.14	184.75	213.30	193.52	189.38	229.45	238.46	207.18	249.80	281.70	325.92
1.54	-.02	3.72	3.03	2.48	1.27	3.11	1.90	2.05	.02	-.75	-1.11
6.87	9.66	6.55	7.03	7.32	9.69	6.49	8.41	7.67	7.56	8.30	11.05
2.38	2.56	4.00	2.05	4.02	1.68	3.81	5.93	2.40	3.71	3.28	4.88
42.97	45.43	51.76	41.95	47.37	46.93	44.64	48.96	52.66	48.33	41.68	44.87

Table 22

Least Squares Means High School
Quintile Rank From Low to High

Average Dollar	1	2	3	4	5
PELL	272.95	287.70	308.54	309.04	312.01
SEOG	83.57	81.09	77.45	78.56	79.28
State Grant	116.78	127.94	133.67	150.25	205.12
College Grant	306.57	316.83	323.03	336.27	436.10
Other Grant	72.73	86.76	81.19	88.82	149.09
GSL	562.55	550.87	588.65	597.88	558.32
NDSL	86.55	105.60	106.88	102.80	111.22
College Loan	89.29	66.33	73.72	69.04	63.84
Other Loan	50.88	73.37	75.49	73.95	64.80
CWS	153.92	145.45	152.81	159.09	173.27
PT Work	116.61	127.75	135.93	143.52	135.72
FT Work	11.03	13.36	13.30	11.50	10.01
Summer Work	255.87	301.24	331.44	361.82	380.36
Savings	176.73	142.45	150.26	161.67	179.36
Spouse	8.18	5.68	6.33	2.69	2.44
GI	17.78	7.91	4.99	3.12	3.46
GI Parent	10.82	7.93	5.75	5.39	3.63
Social Security	43.96	42.38	40.57	41.72	40.46
Percent of Cost					
PELL	6.00	6.41	6.75	6.72	6.70
SEOG	1.31	1.21	1.13	1.15	1.14
State Grant	1.83	2.04	2.08	2.47	3.48
College Grant	1.97	2.09	2.17	2.47	4.14
Other Grant	.42	.71	.59	.82	2.01
GSL	5.75	5.71	6.80	7.16	6.33
NDSL	.89	1.29	1.36	1.28	1.42
College Loan	1.18	.68	.90	.78	.68
Other Loan	.49	.94	1.00	.95	.78
CWS	.20	.18	.19	.20	.23
PT Work	2.23	2.61	2.71	2.81	2.64
FT Work	.28	.36	.35	.31	.26
Summer Work	2.76	3.67	4.30	4.94	5.17
Savings	2.71	1.67	1.82	2.10	2.39
Spouse	.26	.17	.17	.08	.08
GI	.49	.18	.11	.06	.07
GI Parent	.33	.27	.21	.19	.14
Social Security	.80	.84	.80	.82	.78

Table 23

Least Squares Means for Various Categories

Average Dollar	Resident	Commuter	Male	Female	Public	Private	Univ.	4-Year	2-Year
PELL	328.95	267.14	306.03	290.07	215.52	380.52	301.72	311.32	281.11
SEOG	85.33	74.65	81.25	78.74	68.72	91.26	85.38	80.37	74.22
State Grant	152.96	140.54	149.16	144.35	122.61	170.90	144.97	146.41	148.88
College Grant	362.25	325.27	349.24	338.29	294.66	392.87	342.99	357.75	330.54
Other Grant	104.35	87.09	97.06	94.38	93.48	97.96	110.96	86.45	89.75
GSL	619.91	523.40	569.91	573.40	628.67	514.64	505.39	559.94	649.63
NDSL	119.94	85.29	99.99	105.23	102.72	102.50	101.78	94.99	111.06
College Loan	79.75	65.14	75.04	69.84	74.31	70.58	64.76	72.89	79.67
Other Loan	80.69	54.71	64.76	70.63	71.65	63.74	63.90	66.88	72.31
CWS	177.66	136.16	157.13	156.69	113.31	200.51	178.09	155.51	137.13
PT Work	65.01	198.80	136.98	126.84	147.48	116.33	137.73	137.55	120.43
FT Work	6.22	17.46	14.61	9.07	9.27	14.41	11.95	15.09	8.48
Summer Work	371.36	280.94	368.71	283.58	402.40	249.90	351.79	309.56	317.09
Savings	176.03	148.16	166.82	157.37	196.57	127.61	171.74	150.67	163.87
Spouse	5.01	5.11	6.09	4.04	2.00	8.13	4.44	5.87	4.87
GI	6.05	8.85	9.22	5.69	7.65	7.25	7.26	7.11	7.99
GI Parent	7.98	5.43	7.28	6.13	1.94	11.47	7.43	6.71	5.97
Social Security	42.31	41.32	40.65	42.99	42.17	41.46	44.62	40.40	40.44
Percent of Cost									
PELL	6.98	6.05	6.61	6.42	6.30	6.73	6.23	7.01	6.30
SEOG	1.31	1.07	1.22	1.16	.96	1.42	1.24	1.26	1.08
State Grant	2.52	2.24	2.41	2.35	1.93	2.83	2.25	2.40	2.49
College Grant	2.92	2.21	2.68	2.46	.88	4.25	2.62	2.96	2.12
Other Grant	1.06	.76	.92	.90	.86	.96	1.15	.76	.82
GSL	8.30	4.40	6.44	6.26	5.67	7.03	5.15	5.80	8.10
NDSL	1.78	.71	1.19	1.30	1.09	1.41	1.19	1.10	1.46
College Loan	1.07	.62	.90	.79	.81	.88	.70	.80	1.03
Other Loan	1.18	.48	.79	.87	.88	.78	.71	.81	.98
CWS	2.36	1.61	1.99	1.99	1.40	2.58	2.24	2.06	1.67
PT Work	.91	4.29	2.66	2.54	3.01	2.19	2.62	2.71	2.47
FT Work	.15	.47	.37	.25	.36	.26	.28	.39	.26
Summer Work	5.29	3.05	5.08	3.25	5.44	2.89	4.73	3.76	4.01
Savings	2.48	1.79	2.23	2.05	2.68	1.60	2.38	1.86	2.18
Spouse	.13	.18	.17	.14	.16	.14	.13	.17	.16
GI	.14	.22	.22	.14	.19	.18	.18	.18	.19
GI Parent	.23	.23	.24	.22	.25	.21	.22	.23	.23
Social Security	.81	.80	.79	.83	.88	.74	.85	.78	.79

Table 24

Least Squares Means
Aggregated Income Categories
(000)

Average Dollar	<10	10-15	15-25	25-40	40-100	100 or more
Pell	647.87	484.01	275.86	121.93	52.05	2.81
SEOG	126.07	102.32	70.68	44.06	20.74	-1.81
State Grant	260.86	230.85	187.53	131.37	81.23	33.41
College Grant	335.33	332.37	330.61	309.87	208.73	15.22
Other Grant	98.04	102.92	103.09	92.83	74.21	33.97
GSL	567.61	620.92	646.24	599.11	347.49	83.15
NDSL	120.83	133.27	130.18	98.28	43.37	- .80
College Loan	52.49	59.43	63.92	68.00	54.81	11.92
Other Loan	56.18	70.77	77.18	84.03	64.84	19.01
CWS	189.29	182.90	163.50	124.55	60.27	-12.02
PT Work	116.03	134.56	145.29	156.79	126.65	76.94
FT Work	14.11	11.53	12.87	11.07	10.54	5.61
Summer Work	241.59	287.37	328.17	385.57	362.05	209.30
Savings	109.88	130.82	146.79	163.65	164.26	119.00
Spouse	3.67	2.41	3.72	3.85	5.50	7.67
GI	5.43	5.31	3.38	3.13	3.08	1.34
GI Parent	8.73	9.15	7.67	4.17	2.44	.32
Social Security	70.99	60.02	35.22	19.26	12.27	9.89

Table 25

Least Squares Means
Aggregated Cost Categories
(000)

Average dollars	2-4.5	4.5-5.5	5.5-7.5	7.5-9	9 and over
Pell	275.28	293.33	291.91	265.29	194.62
SEOG	34.18	44.91	57.66	79.90	85.06
State Grant	104.62	126.00	166.09	244.52	129.82
College Grant	95.19	87.00	157.74	397.68	539.16
Other Grant	42.98	54.31	73.42	95.74	154.43
GSL	118.13	316.09	553.35	692.19	707.34
NDSL	41.19	65.34	90.49	118.56	121.41
College Loan	23.49	37.86	58.83	55.36	83.26
Other Loan	20.85	48.30	71.60	80.52	88.74
CWS	74.71	86.24	94.92	147.32	187.21
PT Work	97.64	114.44	153.17	135.06	129.90
FT Work	15.66	12.80	11.19	8.99	6.15
Summer Work	154.39	231.48	303.61	393.31	428.93
Savings	69.59	105.17	137.63	171.72	211.23
Spouse	8.89	7.80	4.20	.79	.68
GI	3.37	2.60	4.66	3.64	3.80
GI Parent	11.32	9.92	3.53	.86	1.42
Social Security	25.02	34.29	37.32	37.86	38.54

Table 26

Least Squares Means
Reduced Categories for Other Characteristics

Average Dollar	1-4	5	4 and above	2 - year
Pell	262.25	265.92	277.04	251.14
SEOG	59.17	61.51	64.16	56.52
State Grant	121.74	186.68	155.10	153.32
College Grant	199.69	311.02	269.71	241.00
Other Grant	49.77	118.57	87.02	81.33
GSL	489.65	465.20	428.16	526.68
NDSL	83.25	91.55	81.52	93.28
College Loan	55.18	48.34	47.30	56.22
Other Loan	66.52	57.48	58.50	65.51
CWS	106.91	129.25	130.30	105.86
PT Work	26.91	125.18	136.72	115.36
FT Work	12.33	9.58	13.61	8.31
Summer Work	279.46	325.33	312.97	291.72
Savings	125.02	153.12	138.90	139.24
Spouse	5.76	3.19	4.61	4.33
GI	4.18	3.05	3.04	4.19
GI Parent	6.61	4.21	5.65	5.17
Social Security	34.83	34.39	35.37	33.85

Table 27

Means Under Different Weights Under Study File

	Total File Weighted	Original Weight	Reweighted	Unweighted
Control	1.24	1.24	1.24	---
Sex	1.50	1.49	1.51	---
H.S. Rank	3.94	3.96	3.96	---
Res. Status	1.43	1.42	1.43	---
Income Cost	8.90	8.92	8.91	---
PELL	189.29	202.37	202.29	209.12
SEOG	34.57	37.13	37.22	52.78
State Grant	95.03	103.76	102.87	134.06
College Grant	122.12	133.85	133.72	277.30
Other Grant	54.82	59.92	60.13	97.67
GSL	339.98	368.04	366.93	439.96
NDSL	63.16	69.21	68.89	86.90
College Loan	41.98	45.75	45.56	55.66
Other Loan	53.77	56.57	56.56	67.30
CWS	76.35	82.60	82.44	133.19
PT Work	115.28	121.90	121.40	102.91
FT Work	12.00	12.39	12.22	10.67
Summer Work	277.81	296.24	294.30	365.35
Savings	119.96	127.00	126.65	157.32
Spouse	5.19	5.17	5.13	4.20
GI	3.36	3.09	3.00	2.35
Parents GI	6.86	7.20	7.18	6.01
Social Security	25.95	26.92	26.98	26.54
Cost	4953.88	4975.21	4974.94	---
Drop	.15	0	0	0
Pell per Cost	4.04	4.31	4.33	3.61
SEOG per Cost	.65	.69	.69	.77
State Grant per Cost	1.87	2.04	2.03	2.10
College Grant Per Cost	1.92	2.10	2.09	3.47
Other Grant per Cost	1.06	1.15	1.15	1.45
GSL per Cost	6.56	7.09	7.06	6.60
NDSL per Cost	1.20	1.32	1.31	1.32
College Loan per Cost	.83	.90	.90	.84
Other Loan per Cost	1.07	1.12	1.11	1.05
CWS per Cost	1.40	1.51	1.51	1.89
PT Work per Cost	2.72	2.85	2.85	1.97
FT Work per Cost	.29	.30	.30	.22
Summer Work per Cost	5.78	6.15	6.11	6.00
Savings per Cost	2.51	2.64	2.63	2.57
Spouse per Cost	.12	.12	.12	.07
GI per Cost	.08	.08	.07	.05
Parents GI per Cost	.16	.17	.17	.12
Social Security Per Cost	.57	.59	.59	.47